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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/032,659	02/27/98	ANDERSON E	P165

LM02/0503

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EXAMINER	
ROSSI,J	
ART UNIT	**PAPER NUMBER**
2772	2

DATE MAILED: 05/03/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/032,659	Anderson
Examiner	**Group Art Unit**
Jeffrey Allen Rossi	2772

☒ Responsive to communication(s) filed on *Feb 27, 1998* .

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-13* is/~~are~~ pending in the application.

Of the above, claim(s) *NONE* is/~~are~~ withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-13* is/~~are~~ rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on *Feb 27, 1998* is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

DETAILED ACTION

1. This Office Action is responsive to the following communications: the application, filed 02/27/98.

2. Claims 1-13 are pending in the application. Claims 1, 7, and 11 are independent. All claims are as originally filed.

3. It is likely that the group Art Unit has changed since the last communication. The new Art Unit is 2772. To insure the proper and expedient correlation of papers with the Application, all correspondence should be directed to group Art Unit 2772 (eff. 5/98).

Drawings

4. The drawings are objected to because legends are not present in Figures 4-5, 7A-B, 8A-C, and 9A-B. Pursuant to 37 CFR 1.84-*(o)*, Examiner requires legends or labels for all numbered elements, with careful attention to be made with respect to the addition of new matter. Correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski, European patent no 661,658 A2 07/1995 in view of Ogawa, U.S. Patent no. 5,198,851, 03/1993..

7. Per independent claim 1; Parulski discloses a method for controlling user interaction in a digital imaging device, the digital imaging device having a display the method comprising the steps of:

a) providing the digital imaging device with a directed image capture sequence comprising a set of electronic instructions ("the plan may be... recorded in electronic form on an instruction disk"—col. 3, lines 21-30);

b) executing the directed image capture sequence to display instructions on the display that prompt the user to perform specific operations (accessed through processor 12—3: 21-29; and

c) guiding the user through a series of related image captures ("instructions direct an operator, for example, to take four different poses"—col. 3, lns. 25-29).

Parulski lacks an explicit recitation of "interactive instructions". Ogawa, on the other hand, demonstrates that it was notoriously well-known to provide interactive instructions, i.e., a script, in a cameras ("interactive communication with the camera, and the setting of the data pack"—1: 57-61, for taking pictures Figs. 2-7. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Ogawa with Parulski, by making Parulski's instructions interactive in processor 12 of Parulski, because interactive instructions would have been easier to follow.

Regarding the use of the claim language "related image captures", the Examiner had contemplated that if Ogawa alone would have had the feature "related image captures", since a user of Ogawa would have inevitably employed Ogawa to capture images that were related. However, upon careful examination of this claim, it became apparent that the Applicant explicitly claimed "related image captures" in conjunction with "instructions" which requires that the instructions somehow expressly relate to the capture of multiple images in order to preempt this claim.

Regarding the use of the terminology "script" it is believed that the interactive instructions themselves constitute a script. Even if Applicant disagrees with this premise, the instructions are evidence of an underlying script, because scripts were a notoriously well-known low level programming language to effect these types of operations.

2 Regarding dependent claim 2, Parulski and Ogawa demonstrate all elements as applied in the rejection of claim 1, *supra*. Per the limitation of "wherein step a) further

includes the step of providing the directed image capture sequence by externally loading the program instructions into the digital imaging device", this is suggested by Parulski (disk drive 13, Figure 1; "instruction disk"—3: 22-25).

3 Regarding dependent claim 3, Parulski and Ogawa demonstrate all elements as applied in the rejection of claim 2, *supra*. Per the limitation of "wherein step a) further includes the step of providing the program instructions as a text-based script", this suggested by the observation that the Parulski's instructions are human readable. However, it is also noted that text based script programming languages, such as Java™, were notoriously well-known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to employ a text based script in Parulski and Ogawa, because text based scripts are easily programmed by a novice, easy to understand, and have particular suitably to platform independence.

4 Regarding dependent claim 4, Parulski and Ogawa demonstrate all elements as applied in the rejection of claim 3, *supra*. Per the limitation of "further includes the step of executing the directed image capture sequence by interpreting the text-based script", it was notoriously well-known to interpret text based scripts to perform program instructions. Interpretation would have been obligatory in the above combination because digital processors do not "understand" text: they employ binary numbers.

8. Regarding dependent claim 5, Parulski and Ogawa demonstrate all elements as applied in the rejection of dependent claim 4, *supra*. Per the limitation of "wherein step c) further includes the step of prompting the user for specific information, and entering

the specific information on a text entry screen", this feature is a well-known facet of interactive displays (interactive, meaning that some user input is required). Since this is a necessary part of the combination of Parulski and Ogawa, the method and motivation to combine are identical to that set forth in claim 1.

6 Regarding dependent claim 6, Parulski and Ogawa demonstrate all elements as applied in the rejection of dependent claim 5, *supra*. "Official notice is hereby taken that translucent overlay bars were notoriously well-known in th art of graphical user interfaces. It would have been obvious to one of ordinary skill in the art to provide a translucent overlay on the display screen 14 of Parulski, in order to conserve space, and thus reduce the size of the system of Parulski.

7 Per independent claim 7, Ogawa discloses a method for directing image capture sequences in a imaging device having a display, the method comprising the steps of:

a) externally loading a script comprising program commands into the digital imaging device (see ic card **3**, Fig. 1A);

b) displaying the script as a menu item for selection by a user (Fig. 2, e.g., "user customization"—3: 65);

c) in response to the user selecting the script menu item from the menu, passing operational control from the digital imaging device to a script interpreter (implicit, when the use is interacting with the script, the user is not interacting with the camera.;

d) interpreting and executing each of the script commands, wherein a first plurality of the script commands are for displaying interactive instructions on the display requesting the user to perform specific camera operations, thereby guiding the user through a series of image captures (Figs. 2-9c, especially 9c);

e) passing operational control from the script interpreter to the digital imaging device after the script has requested the user to capture an image ("...ic card which stores the information on the camera and transmits the information to the camera when required to set the operation of the camera—1: 41-43); and

While it is arguable whether Parulski *de facto* passes operational control from the camera to the script interpreter, this is suggested by Parulski, i.e, it would be counter intuitive to operate the camera while changes were being made to critical settings ("...ic card which stores the information on the camera and transmits the information to the camera when required to set the operation of the camera—1: 41-43). Nonetheless, it would have been obvious to one of ordinary skill in the art at the time of the invention to pass control between the camera and the script interpreter in order to prevent pictures from being taken while Ogawa's critical parameters were being changed.

Although Ogawa suggested "related images—Fig. 9c), it's instructions are not directed toward multiple images per se. Parulski, on the other hand, explicitly demonstrates electronic instructions for taking multiple images. It would have been obvious ton one of ordinary skill in the art at the time of the invention to combine Parulski with Ogawa, by employing scripts taught by Parulski, i.e., sets of instructions, for taking multiple related pictures, in order for example, to enable a user to take appropriate pictures for a personalized video game, as taught by Parulski —Abstract, and thus expand the applications of Ogawa. Regarding the limitation of "digital" imaging device, the benefits of digital technologies are notoriously well-known, such as portable picture formats, ease of enhancement by numeric DSP techniques, ease of programmability, and "instant" compatibility with computer hardware.

The Examiner remarks that the explicit recitation of "passing control from a digital imaging device to a script interpreter" implies theat the "script interpreter" is not part of the "digital imaging device". This is a question of semantics, since it depends on what on intends to include in the term "imaging device". The rationale behind the rejection, however, is largely unaffected by this observation, since it would have been

obvious to one of ordinary skill in the art at the time of the invention to allow a user to take a picture by "passing control" to the imaging device, in order to allow a user to effect the operations (s)he was instructed to do. This was also a well-known tenant of modular programming, i.e, passing control from one module to another in order to allow modules to be changed without changing entire sets of programs.

8 Per dependent claim 8, Parulski and Ogawa demonstrate all claimed elements as applied in the rejection of independent claim 7, *supra*. Per the limitation of "wherein step a) further includes the step of loading the into the digital imaging device from a removable memory", this is suggested both by Parulski (disk **13**, Fig. 1), and Ogawa: ic 3, Fig. 1A. This limitation provided the notoriously well-known benefit of changing program instructions.

9 Per dependent claim 9, Parulski and Ogawa demonstrate all claimed elements as applied in the rejection of independent claim 8, *supra*. Per the limitation of "operational control from the digital imaging device to the script after the user has captured the image" a similar argument is made to the "passing of operational control" in independent claim 7, *supra*. It would have been obvious to one of ordinary skill in the art at the time of the invention to pass control back to the script after capturing an image in order to allow for continued instructions, since multiple images are claimed..

9 Per dependent claim 10, Parulski and Ogawa demonstrates all claimed elements as applied in the rejection of independent claim 9, *supra*. Per the limitation of "wherein step f) further includes the step of passing operational control back to the digital imaging device after the script completes execution", it would have been obvious to one of ordinary skill in the art at the time of the invention to do this in order to allow a user to continue using the image device without the assistance of interactive help, in order to allow the user to do other things..

9. Per independent claim 11, Parulski demonstrates

an imaging device **20** (Fig. 1)for capturing image data ;

a memory coupled to the imaging device for storing the image data as captured images **12** (Fig. 1);

a display for displaying a captured image **14** (implicit, a well-known feature of digital imaging devices as shown in Fig. 1);

means for externally loading a script (Instruction book in electronic form—3: 20-25) comprising program commands into the memory (;

a processor **12** coupled to the imaging device and to the memory for controlling operation of the digital imaging device,

Parulski lacks an explicit recitation of "the processor including means for interpreting and executing each of the script commands, wherein when the script commands are executed, **interactive instructions** are displayed on the display requesting the user to perform specific camera operations, thereby guiding the user through a series of related image captures. Providing interactive instructions was notoriously well-known and additionally demonstrated by Ogawa Figs. 2-9c. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Ogawa with Parulski by providing interactive instructions on display 12 of Parulski. Scripts are an implicit part of interactive instructions, and thus a script would have been the preferred method of combining Ogawa and Parulski. The rational for combining Ogawa and Parulski has been elaborated in further detail in the rejection of claim 1, and therefore has been summarized here in order to avoid repetition.

10. Per dependent claim 12, a script interpreter is a necessary component of employing scripts, and is suggested by Ogawa (see script, Figs. 1-9c), as was notoriously well-known in the art of interactive help..

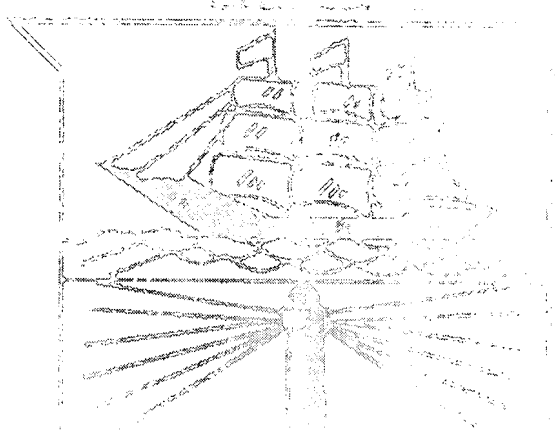
11. Per dependent claim 13, the limitation of "a control program stored in memory and executed by the processor, the control program comprising,

means for displaying the script as a menu item on the display for selection by a user" is suggested by Ogawa (e.g., Figs 1-9c, ""user customization"—Fig. 3) as was notoriously well-known in the art of interactive menus.;

Per the limitation of "means for passing operational control to the script interpreter in response to the user selecting the script menu item from the menu", it

would have been obvious to one of ordinary skill in the art at the time of the invention to do this in order to initiate a script, and interact with it.

More detail regarding the method and motivation for combining regarding these limitations has been set forth, *supra* in this action.



Prior-Art Made of Record Establishing State-of-the-Art Pertinent to Applicant's Disclosure

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant is reminded that "in amending in response to a rejection of claims in an application..., the applicant... must clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections" (See 37 CFR 1.111 (c))

U.S. Patents

5,477,264	Sarbadhikari	(see element 24b, Fig. 2 and col. 1, lin. 14 to col. 3, ln. 21
5189490	Shetty	(see esp. Fig. 5)
5343386	Barber	(see esp col. 2, lns. 56-61)
5220614	Crain	(see esp. col. 3, lns. 26-40, col. 3, lns. 55-60)
5797051	McIntyre	(see all pages, translation of Japanese patent)
5432871	Novik	(see esp. Abstract)
5587740	Brenan	(see summary of invention)
4519692	Michalik	(see abstract)
5764276	Martin	(see esp. Fig. 1)
5,644,694	Appleton	describes scripts in digital movies see whole patent
4916435	Fuller	another application of scripted digital imaging, see whole patent
4540276	Ost	(see Figs. 51-5d)
5,343,509	Dounies	shows digital device operating according to script see whole patent
5432871	Novik	(see esp. col. 2, lns. 31-42)
5231651	Ozaki	(see abstract)
5473370	Moronaga	(see abstract)
5589902	Gruel	(see whole patent)

Foreign Patents

EP 729,271 A2 (see whole patent)

EP 817,476 A2 (general teaching on viewfinders)

JP 9-171213 (see related us patent, date qualifies as prior-art)

EP 568,468 A2 (see US reference by same author)

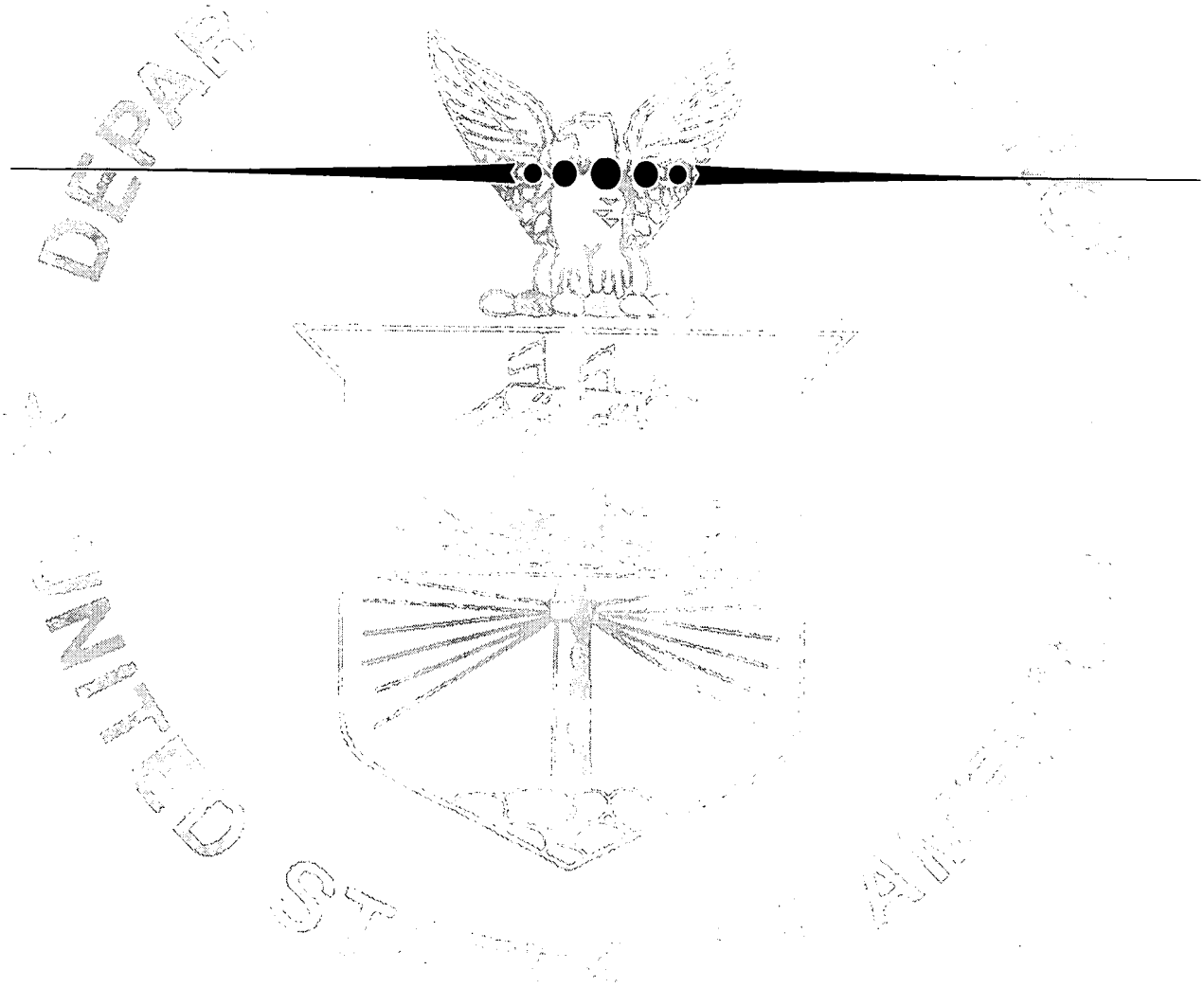
Non-patent Literature

Grimm, Leigh "The Manipulation Proclamation" see discussion of "Guided Activities.

Remarks

The search of this case focused on prior-art "in the genre" of Applicant's disclosed application, i.e., general use optical cameras typical associated with mobile "picture taking", and taking in to account potential limitations that could eventually be incorporated into Applicant's claims. However, it is duly noted that the use of broad claim language such as "digital imaging device" and "script" appears to read on multitudinous known digital imaging devices, such as tomographers, i.e., CAT scanners, photocopying machines, microscopes, lithography machines, and X-Ray devices, just to name a few. Loadable scripts which provide instructions for multiple related images (noting that "related images" is implied in CAT scans, dental X-rays, microscopic imaging, and double sided copies, for example) appear to have been employed in these devices. Certainly the motivation to employ interactive help type scripts in these devices was strong, they would have been difficult or impossible to use

without them. Furthermore, it was notoriously well-known to provide these types of scripts, which provide interactive help, just in the photocopying digital imaging systems, for example. All of these products, too numerous to cite, bear on the patentability of Applicant's claims.



Conclusion

13. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to

(703)-308-9051 (**formal** communications intended for entry)

Or:

(703)-305-9724 (**informal** communications labeled **PROPOSED** or **DRAFT**)

Hand-delivered responses should be brought to:

Sixth Floor Receptionist, Crystal Park II, 2121 Crystal Drive, Arlington, VA.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey ROSSI whose telephone number is (703) 308-5213. The examiner can normally be reached on Monday - Friday from 0830 to 1630 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark POWELL, can be reached on (703) 305-9703.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

MARK R. POWELL
SUPERVISORY PATENT EXAMINER
GROUP 2700

JR

April 26, 1999